

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission,
On its Own Motion,

Application for Certificate of Service
Authority under Section 16-115 of the
Public Utilities Act

AFFIDAVIT

State of Wisconsin
County of Brown

No. 00-0199

OFFICIAL FILE (on reg)
ILL. C. C. DOCKET NO. 00-0199 A
WPS Exhibit No. 1

Witness

Date

4/5/01

Reporter

Clark

I, Chris Matthiesen, being duly sworn on oath, do depose and state as follows:

1. That I am Director of Energy Consulting at WPS Energy Services, Inc., whose address is 1088 Springhurst, Green Bay, Wisconsin, 54304.
2. That I am familiar with the original application for Certificate of Service Authority filed under Section 16-115 by WPS Energy Services, Inc. and granted on April 18, 2000.
3. That I have reviewed the Report of the Staff of the Illinois Commerce Commission dated March 23, 2001 pursuant to the March 19, 2001 Order of the Commission in the above captioned matter.
4. That I disagree with the conclusion of the Staff Report dated March 23, 2001. It does not demonstrate that Power and Energy can be reasonably and economically provided to Wisconsin Public Service Company's retail customers by the Illinois utilities described in that report.
5. That I supervised and directed the preparation of the WPS Energy Services Response To

The Staff Report To The Commission Dated March 23, 2001 attached as Exhibit A and incorporated herein by reference and filed with this affidavit on March 27, 2001.

6. That I agree with the information, data and conclusions presented in said Response and believe it to be true to the best of my knowledge.

FURTHER AFFIANT SAYETH NOT.

Chris Matthiesen
CHRIS MATTHIESEN

SUBSCRIBED AND SWORN TO before me, a Notary Public, on this 27 day of MARCH, 2001.

Margaret Orendorff
NOTARY PUBLIC

March 26, 2001

WPS Energy Services, Inc.

00-0199

**RESPONSE TO THE STAFF REPORT
TO THE COMMISSION DATED MARCH 23, 2001**

WPS Energy Services, Inc. (WPS-ESI) files the following response the Staff Report to the Commission dated March 23, 2001.

1. **Customer Specific Analysis – Methodology** In an effort to test the validity of the WPS-ESI analysis showing that customers of the Wisconsin Public Service Corporation (“WPSC”) are not a viable economic market for the four Illinois utilities (“Illinois utilities”) where WPS-ESI seeks to serve customers, the Staff compared the Power Purchase Option (“PPO”) pricing, which does not vary by load factor, to WPSC rates, which do vary by load factor. The comparison of electric rates based on two completely different methodologies a matter of concern and adversely impacts the Staff analysis.

One flaw in the PPO pricing mechanism is the manner in which it groups industrials by demand, irrespective of load factor. During the Commission Chairman’s Round Table discussions it was noted this type of pricing mechanism results in higher load factor customers effectively subsidizing the lower load factor customers within a class, by allowing the lower load factor customers to reap far greater savings through the PPO program than higher load factor customers. The effect of the pricing mechanism is that the savings for lower load factor customers does not account for the actual costs associated with serving that type of customer. The WPSC regulated rates, like most regulated utility rates, are designed to recover the costs associated with serving a particular customer. In order to correct for the discrepancy in how the PPO and WPSC regulated rates are structured, WPS-ESI presented an average customer scenario in the original application for ARES certification. WPS-ESI averaged the WPSC rates to more accurately compare the two rates involved. By comparing an average Commonwealth Edison customer, for example to an average WPSC customer, WPS-ESI presented information based on like customer profiles. In it’s Report, the Staff has taken the PPO pricing and compared it to a specific type of customer and declared the WPS-ESI analysis invalid. In fact, what the Staff has demonstrated is one flaw in the PPO pricing mechanism that has frustrated industrials and ARES alike, but what the Staff has not proven is that it is economic for the Illinois utilities to serve a 30% or lower load factor customer.

In order to compare the costs associated with serving a 30% load factor customer, the PPO pricing needs to be adapted, much like the WPSC rates were adapted in the original application for certification. As noted, the WPSC rates account for the actual costs of serving a 30% load factor customer. To determine the costs associated with serving a 30% load factor customer in other areas, WPS-ESI informally surveyed several wholesale electric providers. We found that some would charge as much as 47% more to serve a customer with a load factor of

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30% than they would charge a customer with an 80% load factor. (The original application for certification assumed an 80% load factor customer.) Most wholesale electric providers provided percentage increases in the mid-30s, some were hesitant to provide numbers at all without an actual customer load profile to review because the costs can vary based on when the energy is used. The best price provided represented a 15% increase to serve a customer with the low load factor, but the individual surveyed cautioned this to be a minimum charge based on the customer's load profile.

The original application for certification calculated the costs associated with serving an 80% load factor customer in WPSC territory with power purchased via the PPO program to range between \$44.6-\$46.2 per MWH. Using the average from the survey, the PPO pricing would have to be adjusted by 37% to be a reasonable proxy for the actual costs associated with serving a 30% load factor customer. A 37% increase in cost is \$61.1 - \$63.3 per MWH, or an average of \$62.2 per MWH. According to the Staff Report the average cost for a 30% load factor customer served by WPSC within the WPSC territory is \$51.3. Therefore it is less expensive for a WPSC customer to purchase power and energy from WPSC than to purchase power provided through the PPO. Even using the least expensive survey response (25% increase), the costs associated with serving this same customer via the PPO program would range between \$51.30 - \$53.13, or an average of \$52.22 per MWH. Hence, an Illinois utility cannot economically deliver power and energy to a retail customer in the WPSC service territory.

~~2. Customer Specific Analysis - Application When applying the cost data the Staff derived for 30% load factor customers, the Staff used an erroneous assumption. The Staff assumes that "the spread of energy by time of day and by season stays the same with varying load factor". This means that a customer would have the same on peak / off peak energy split no matter what their load factor. Typically, customers with lower load factors have a higher on peak energy percentage due to their predominant day time use (1st shift) in comparison to a customer with a high load factor who has operations around the clock. With the large differential between on peak and off peak PPO energy prices, a small error in assumption about on peak / off peak energy percentages can have a large effect on the results. Because the Staff's assumption is erroneous, the application of the pricing information in their table of average cost by load factor for WPSC customers to the PPO average pricing is also erroneous. The table below illustrates the differences time of day has on the actual pricing.~~

The tables below illustrate the differences time of day, day of the week, and season has on the actual pricing for WPSC customers (see Table 1) and for PPO customers served by Commonwealth Edison (see Table 2). The Graph that follows puts the data presented in Tables 1 and 2 together to provide a visual demonstration of how customer pricing changes based on load factor and how the typical customer with the corresponding load factor uses energy. Note that based on the calculations described below a 30% load factor customer served by WPSC in WPSC's service territory would be charged approximately \$65.00 per MWH and energy is available through Commonwealth Edison's PPO program for the same customer at \$82.53 per MWH. The Graph demonstrates well that at no point does it become economic for the PPO sourced power to be used to serve retail customers in WPSC service territory.

lmf

~~TABLE 1~~ *fmf*

~~WPSC~~ ~~Total~~
~~Combined~~ ~~CP-1~~ *fmf*
~~Rate~~ *fmf*

	(1)		(2)	(3)	(4)	(5)	
	On Peak	Off Peak	Combined	Generation	Transm'ssn	Local	Total
Load	Energy	Energy	Energy	Rate	Rate	Distribut'n	Comb'nd
Factor	Percent	Percent	Rate			Rate	Rate
100.00%	44.67%	55.33%	\$22.56	\$7.42	\$1.16	\$1.96	\$33.11
90.00%	50.82%	49.18%	\$23.60	\$8.25	\$1.29	\$2.18	\$35.32
80.00%	56.96%	43.04%	\$24.64	\$9.28	\$1.46	\$2.45	\$37.82
70.00%	63.11%	36.89%	\$25.68	\$10.61	\$1.66	\$2.80	\$40.75
60.00%	69.26%	30.74%	\$26.72	\$12.37	\$1.94	\$3.26	\$44.30
50.00%	75.41%	24.59%	\$27.76	\$14.85	\$2.33	\$3.92	\$48.85
40.00%	81.56%	18.44%	\$28.80	\$18.56	\$2.91	\$4.90	\$55.17
30.00%	87.70%	12.30%	\$29.84	\$24.75	\$3.88	\$6.53	\$65.00
20.00%	93.85%	6.15%	\$30.88	\$37.12	\$5.82	\$9.79	\$83.62
10.00%	100.00%	0.00%	\$31.92	\$74.25	\$11.64	\$19.59	\$137.40

LEGEND TABLE 1

- (1) **On Peak Hours:** (15 summer hours * (4/12 months) + 16 winter hours *(8/12 months)) * 5 days/wk * 50 weeks = 3913 hours
- (2) **Combined Energy Rate:** (\$31.92 on peak MWH rate * on peak percentage) + (\$15.00 off peak MWH rate * off peak percentage)
- (3) **Generation Rate:** ((((\$7.54 per Summer Peak KW * (4/12)) + (\$4.36 per Winter Peak KW * (8/12))) / 730 hrs per mo) * 1000) / Load Factor
- (4) **Transmission Rate:** (\$0.85 per peak KW / 730 hours per month) * 1000 / Load Factor
- (5) **Local Distribution Rate:** ((\$1.30 per peak KW / 730 hours per month) * 1.1 (Conversion factor reflecting customer maximum KW vs. peak KW) 1000) / Load Factor

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~~TABLE 2~~ *fmf*

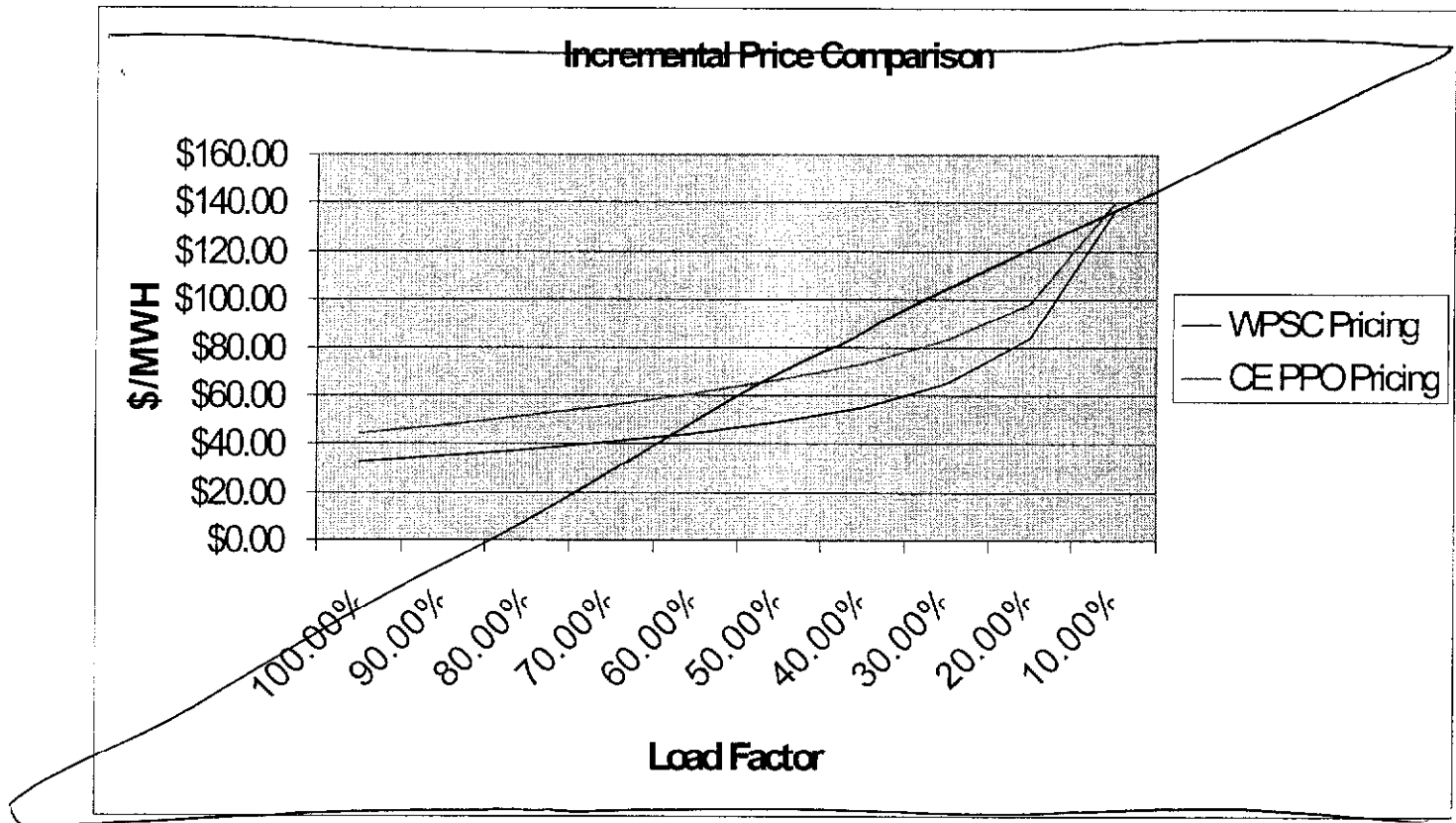
~~CE Total Combined Rate~~
~~Using PPO For Market Price~~

Load	(1) On Peak Energy	Off Peak Energy	(2) Combined Demand &Energy	(3) Transm'ssn	(4) Distribution	Total Combined
<u>Factor</u>	<u>Percent</u>	<u>Percent</u>	<u>Rate</u>	<u>Rate</u>	<u>Rate</u>	<u>Rate</u>
100.00%	37.84%	62.16%	\$36.45	\$5.86	\$1.96	\$44.27
90.00%	44.75%	55.25%	\$39.31	\$6.51	\$2.18	\$48.00
80.00%	51.66%	48.34%	\$42.16	\$7.33	\$2.45	\$51.94
70.00%	58.56%	41.44%	\$45.02	\$8.38	\$2.80	\$56.20
60.00%	65.47%	34.53%	\$47.88	\$9.77	\$3.26	\$60.92
50.00%	72.37%	27.63%	\$50.74	\$11.73	\$3.92	\$66.38
40.00%	79.28%	20.72%	\$53.60	\$14.66	\$4.90	\$73.15
30.00%	86.19%	13.81%	\$56.45	\$19.54	\$6.53	\$82.53
20.00%	93.09%	6.91%	\$59.31	\$29.32	\$9.79	\$98.42
10.00%	100.00%	0.00%	\$62.17	\$58.63	\$19.59	\$140.39

LEGEND TABLE 2

- (1) On Peak Hours: 13 on peak hours per day * 5 days per week * 51 weeks = 3315 on peak hours
- (2) On Peak Energy Rate: $(\$131.19 \text{ per summer MWH} * (4/12 \text{ months})) + (\$27.66 \text{ per winter MWH} * (8/12 \text{ months})) = \62.17 per MWH
 Off Peak Energy Rate: $(\$25.48 \text{ per summer MWH} (4/12 \text{ months})) + (\$18.44 \text{ per winter MWH} * (8/12 \text{ months})) = \20.79 per MWH
 Combined Energy Rate: $(\$62.17 \text{ on peak MWH rate} * \text{on peak percentage}) + (\$20.79 \text{ off peak MWH rate} * \text{off peak percentage})$
- (3) Transmission & Ancillary Rates: \$1.12 per Peak KW (CE Charges), \$1.45 per Peak KW (WEPCO Charges per ATCo), & \$1.71 per Peak KW (WPSC Charges per ATCo)
 $((\$1.12 + \$1.45 + \$1.71) / 730 \text{ hrs per mo}) * 1000) / \text{Load Factor}$
- (4) Distribution Rate: $((\$1.30 \text{ per peak KW} / 730 \text{ hrs per mo}) * 1.1 (\text{Conversion Factor reflecting customer maximum KW vs peak KW} / 1000)) / \text{Load Factor}$

GRAPH



3. **Incremental Cost Analysis** The Report by the Staff uses the theory and application of the Customer Specific Analysis, which detailed only transactions between Commonwealth Edison and WPSC, in an attempt to revisit the Incremental Cost Comparison analysis in the original certification application. It argues that the other three Illinois utilities could purchase power and energy at the Commonwealth Edison border for the PPO price and therefore could serve customers in WPSC's territory with a load factor of 30% or less. As demonstrated above, the theory behind the Staff's analysis is erroneous and the application of the data is based on an incorrect assumption and therefore flawed.

4. **Purchasing wholesale power at WPSC's service territory** We agree with the Staff's finding that there is no evidence that purchasing power and energy at the WPSC border is less expensive than transporting power generated within any of the Illinois utilities' service territories and delivering it to WPSC's territory.

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